

Enter Serial No. here

MANUAL No.Y-BX-25UL

In the event of an enquiry please quote this serial number.



OPERATING AND MAINTENANCE MANUAL BX-DD SMARTBAKE OVEN

**WARNING LABEL, TO REDUCE RISK OF FIRE
OR ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK)
NO USER SERVICEABLE PARTS INSIDE
REPAIR SHOULD BE DONE BY AUTHORIZED PERSONNEL ONLY**



Failure to follow the cleaning and maintenance instructions detailed in this owners manual could affect the warranty of this oven.

CONTENTS

PAGE		
4	PART 1.0	Introduction.
5	PART 2.0	Dimensions.
6	PART 3.0	Specifications.
7	PART 4.0	Safety.
8	PART 5.0	Installation.
10	PART 6.0	Isolation.
7	PART 7.0	Daily Cleaning.
8	PART 8.0	Weekly Cleaning.
14	PART 9.0	SMARTBAKE operating instructions
19	PART 10.0	SMARTBAKE programming instructions.
22	PART 11.0	Using "MONOLINK 6" programming software. (using a laptop for recipe programs)
27	PART 12.0	Light bulb Replacement.
28	PART 13.0	Replacement parts list.
30	PART 14.0	Electrical information.

1.0 INTRODUCTION

The BX-DD Smartbake oven is a computerised, compact, electric convection oven with steam capability and a capacity of three 26" x 18" trays.

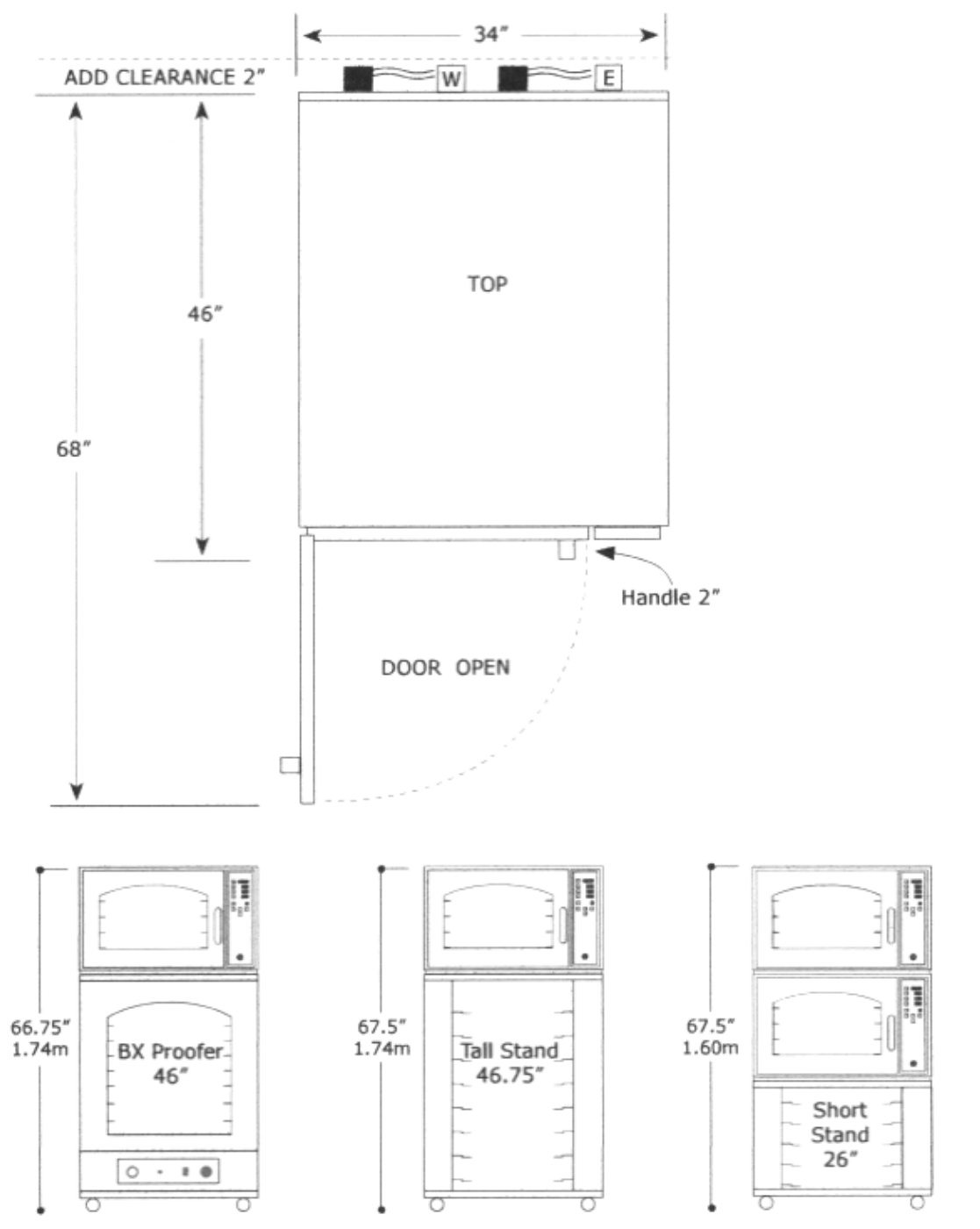
The oven is constructed of stainless steel and features the state of the art smartbake controller with color display and 99 programmable recipes each with up to six steps in which the bake time, temperature, steam time, fan and vent can be controlled.

Designed to be stackable, without the requirement for a separate support.

The high-speed fan and ring element provides efficient air circulation and an even bake across a range of products



2.0 DIMENSIONS



EACH OVEN:

Height: 20.75"
 Depth, door closed: 46"
 Width: 34"

2" (50mm) clearance is required at the back and sides of the oven to allow adequate circulation of air.

Net weight (1 oven) 370 lbs
 Net weight (Short stand) 145 lbs
 Net weight (Tall stand) 206 lbs

3.0 SPECIFICATIONS

EACH OVEN:

Total Power:	7.5 kW.
Electric:	208V/220V Three phase + Neutral + Ground; 60Hz. 24Amps per phase.
Supply Cable:	6 feet of cable with L21-30 plug supplied.
Loading:	7kW Ring element
Fan Drive:	Direct to motor
Tray Size:	26" x 18"
Tray Capacity:	3.
Damper:	Butterfly type.
Noise Level:	Less than 85dB.
Water Supply:	20 PSI Cold water.

- For proper operation of the steam system it is recommended that the water supply follows the following specifications:

Hardness	0-12 grains per gallon
PH range	6.7 to 7.4
Chloride concentration	0 –40 ppm
TDS	50 – 250 ppm
Sodium	0 – 40 ppm
Chlorine	0 ppm
Alkalinity	0 – 150 ppm

Consult your water treatment company for proper water filtration system information.

4.0 SAFETY

To safely use this convection oven, read this owners manual completely and follow these warnings and the other warnings in this manual while operating the oven.

- The oven is designed for the baking of bread, confectionery and savoury products. Do not use it for baking other items without first consulting Adamatic.
- All repairs and maintenance of electrical units must only be carried out by an authorized Adamatic service technician.
- Electrical access panels must not be opened unless the oven power cord is unplugged.
- All connections to the oven must be made in accordance with all National, State, and local codes and regulations.
- While the oven is in operation, and for some time after use, DO NOT TOUCH the oven window and surrounding area as these surfaces may be hot.
- The oven must be operated as described in this manual.
- Use only original manufacturer spare parts on the oven.
- The construction of the oven must not be changed or altered.
- **The owner of the oven is legally obligated to instruct staff** using the oven in its operation and in these safety regulations. The instructions must be readily accessible for the operator.

5.0 INSTALLATION

▪ Water Supply;

It is the customer's responsibility to provide an appropriate water treatment system that will supply water that meets the water specification listed on page 6. The supply must be provided with a shut-off valve, pressure reduction valve and pressure gauge.



NOTE

A RUBBER WASHER SHOULD BE FITTED TO ENSURE A FULL SEAL WITH WATER SUPPLY.
(Part Number A900-05-261)

• Ambient temperatures : -

Maintain ambient temperatures below 115° F (40° C) around the oven.

• Clearance:

Provide 2" (50mm) clearance at the back and sides of this oven and 10" clearance at the top to allow adequate air circulation.

• Initial Cleaning:

Carefully wipe the interior and exterior of the oven thoroughly with a clean cloth soaked in warm soapy water before using the oven for the first time.

• Before use:

Fix top sealing ring M189-01-02000 over top pipe with silicone sealant as seen in the illustration for stacking ovens on the next page.

If a stand is used under the oven, it must be attached by two brackets M189-05-00900 (one each side) at the rear.



CLAMPING BRACKET
M189-05-00900
LEFT SIDE



CLAMPING BRACKET
M189-05-00900
RIGHT SIDE

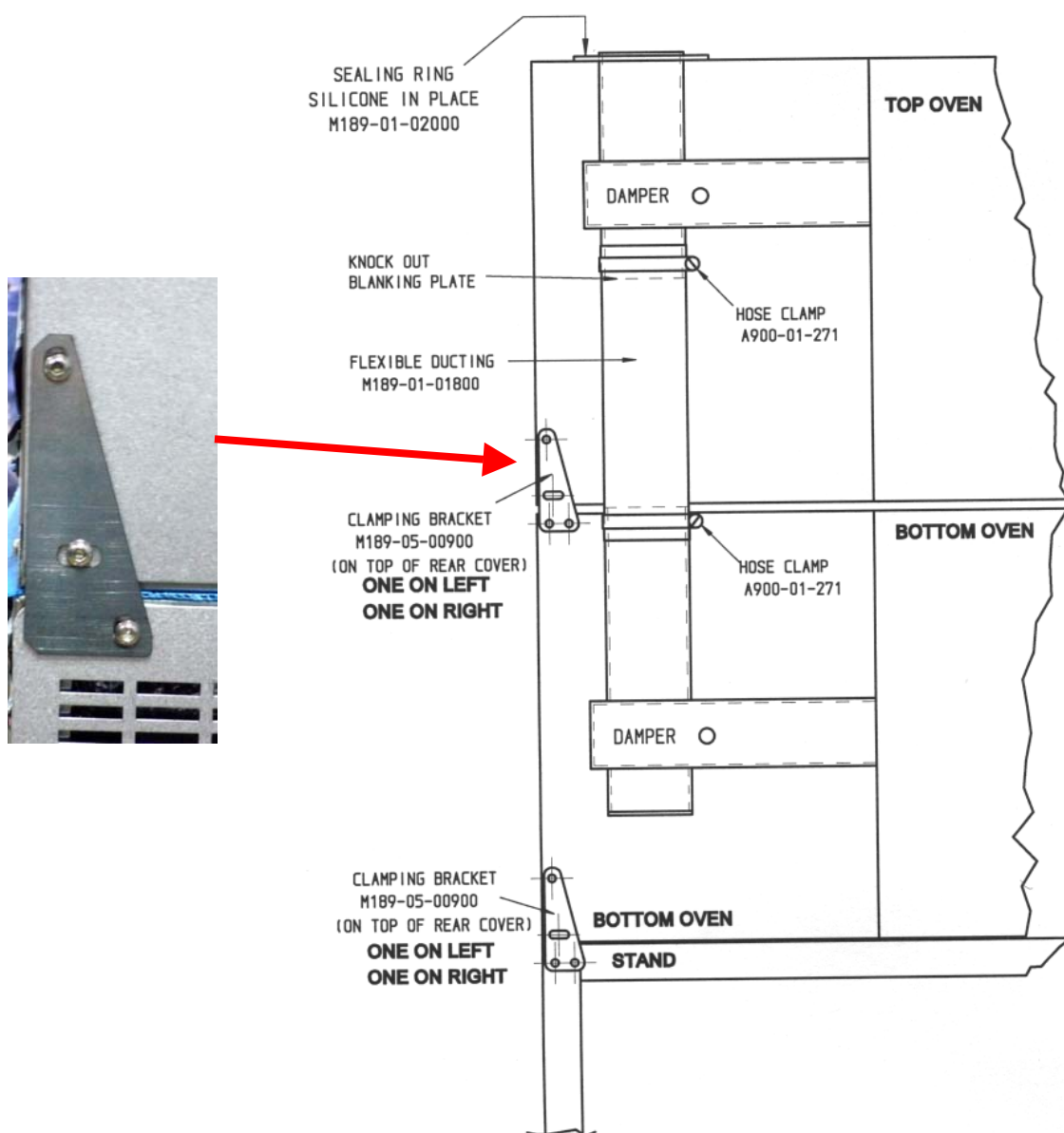
• Stacking two ovens

1. Position ovens one on top of the other.
2. Remove both ovens rear covers.

Or

Remove front control panels (complete with electrics and cables) and work from the front of the ovens.

3. Remove blanking plate (fixed with silicone sealant) from damper tube of upper oven.
4. Fit end of flexible ducting over top damper tube and attach to lower oven damper tube. Use silicone sealant and worm drive clips to fasten in position.
5. Replace both ovens rear covers and fix ovens together using clamping bracket M189-05-00900. (One each side at the rear.)
6. Fix bottom oven to stand using clamping bracket M189-05-00900. (One each side at the rear.)
7. Fix top sealing ring M189-01-02000 over top pipe with silicone sealant.



6.0 ISOLATION

**To stop the oven in an emergency,
Unplug the oven from the outlet.**

7.0 DAILY CLEANING INSTRUCTIONS

NOTE: UNPLUG THE OVEN FROM OUTLET AND ALLOW TO COOL COMPLETELY BEFORE CLEANING

- The equipment is to be cleaned daily using approved chloride – free cleaners.
- NEVER USE STEEL WOOL TO CLEAN OVEN.
- Sweep any debris (after it has been allowed to cool) from oven interior surfaces onto oven removable catch tray and remove for cleaning.
- Wipe oven front, back and sides using a damp cloth that has been soaked in a solution of mild detergent and hot water

IMPORTANT

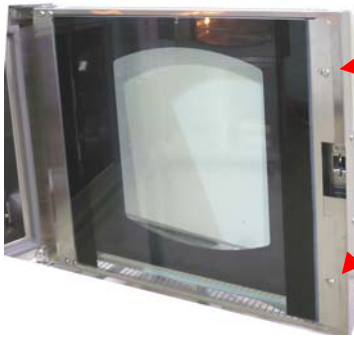
- 1) **NEVER SPRAY THE OVEN DOWN WITH A HOSE.**
- 2) **TO AVOID ELECTROCUTION OR OVEN DAMAGE –NEVER ALLOW WATER, STEAM, CLEANING SOLUTION, OR OTHER LIQUIDS TO ENTER THE ELECTRICAL PANELS OR CONNECTIONS.**
- 3) **DO NOT REMOVE THE REAR PANEL INSIDE THE OVEN.THIS ALLOWS ACCESS TO THE FAN ASSEMBLY AND COULD CAUSE INJURY.**

8.0 WEEKLY CLEANING INSTRUCTIONS

NOTE: BEFORE CLEANING UNPLUG THE OVEN FROM OUTLET
AND ALLOW TO COOL COMPLETELY

Complete daily check then:

- The inner door glass is hinged to enable cleaning of internal surfaces. To open, remove the two screws shown below. The internal surfaces of the door glass can then be cleaned using a suitable glass cleaner.



Remove these screws
to release inner glass
for cleaning

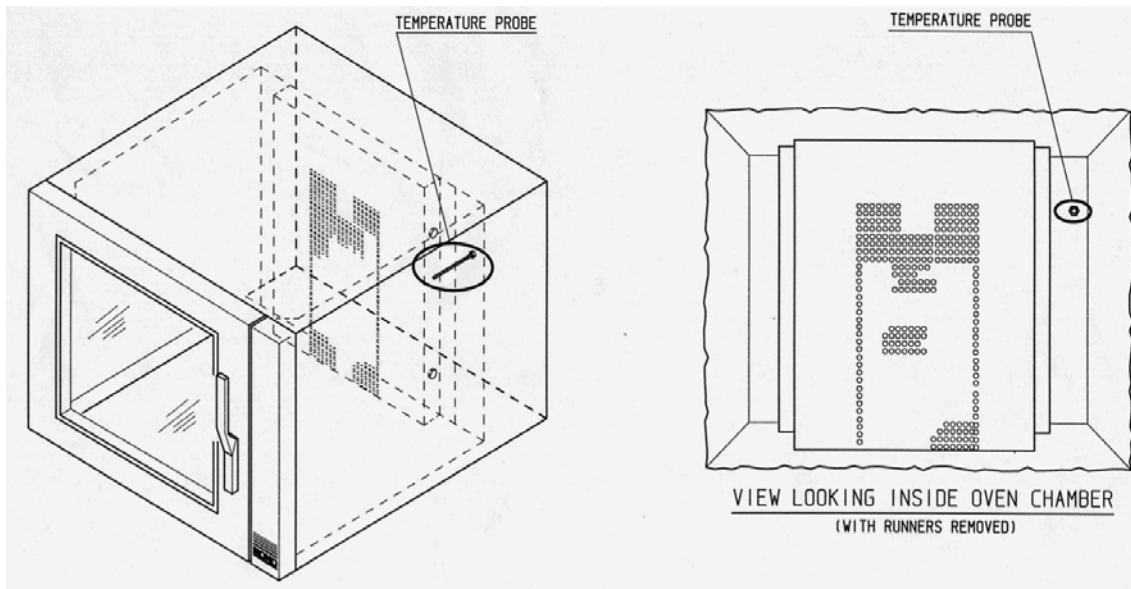
- Remove interior side panels by removing three screws in front of oven and sliding side panels out of the door. Clean side panels and interior surfaces with mild detergent and hot water using a nylon cleaning brush.

Carefully install interior side panels by aligning tabs in rear of panel with slots in the rear panel. Align holes in front of interior side panel with nutsert in sides of oven and secure with three screws.



IMPORTANT:

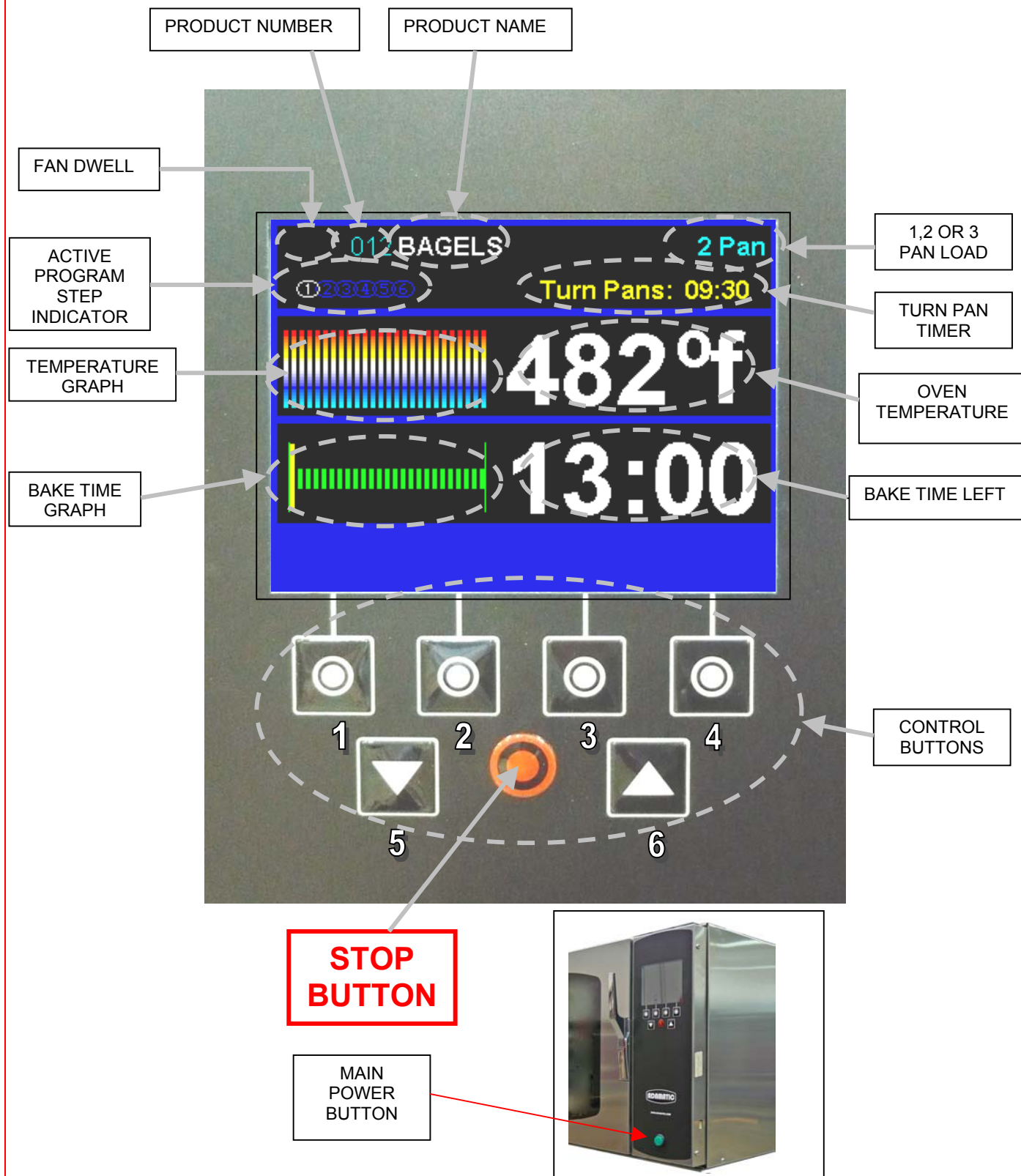
- 1) **WHEN CLEANING INSIDE OVEN, CARE MUST BE TAKEN NOT TO DAMAGE TEMPERATURE PROBE PROTRUDING FROM UPPER CORNER OF CHAMBER REAR WALL. (SEE BELOW)**



- 2) **TO AVOID ELECTROCUTION OR OVEN DAMAGE –NEVER ALLOW WATER, STEAM, CLEANING SOLUTION, OR OTHER LIQUIDS TO ENTER THE ELECTRICAL PANELS OR CONNECTIONS.**
- 3) **DO NOT REMOVE THE REAR PANEL INSIDE THE OVEN.THIS ALLOWS ACCESS TO THE FAN ASSEMBLY AND COULD CAUSE INJURY.**

9.0

SMARTBAKE OPERATING INSTRUCTIONS



Smartbake Control Panel

1. Connect water ensuring there are no leaks.
2. Plug oven into appropriate wall outlet.
3. Turn oven on by pressing green main power button, and the following screen (fig 1) will appear: -

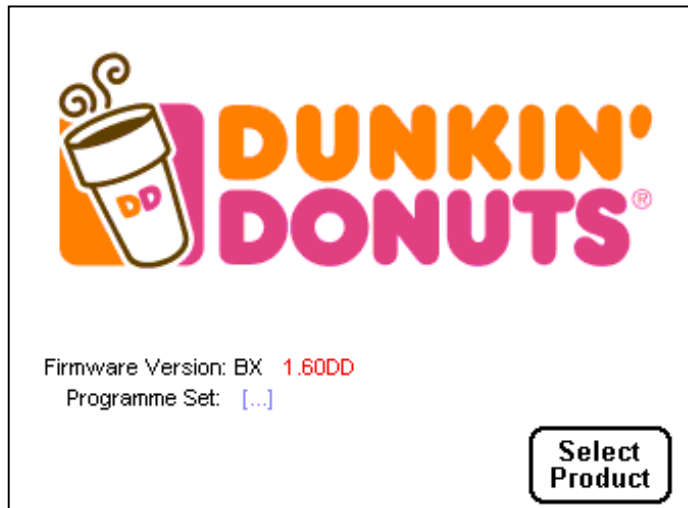


Fig 1

4. Press control button (4) under select product icon and program list appears (see fig 2).



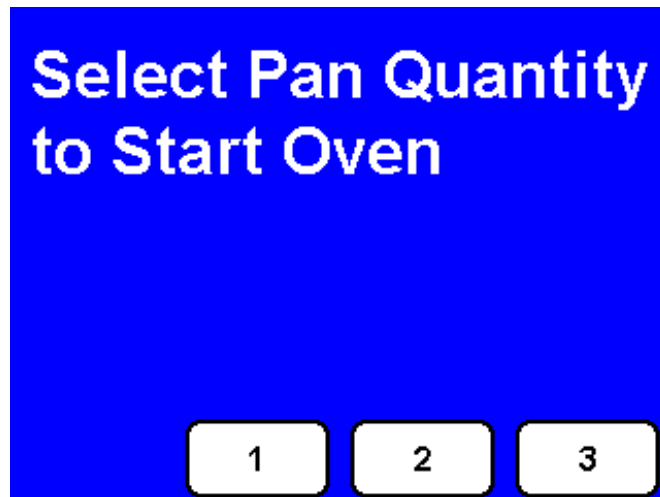
Fig 2

5. Highlight the desired program by pressing control button (2) under the scroll down icon or control button (3) under the scroll up icon.

NOTE.

Pressing control button (5) will scroll down an entire screen and control button (6) will scroll up an entire screen.

6. Select the highlighted product by pressing control button 4 under the enter icon.



7. Choose 1, 2 or 3 pan capacity by pressing the appropriate control button under the icon and oven will start to preheat. (Fig3)

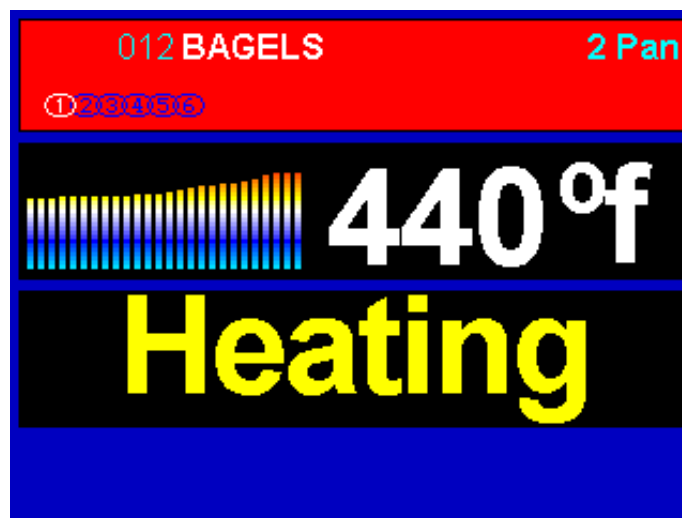


Fig 3

To stop heating press stop button at any time.

8. When oven is ready it will beep three times and the following screen will appear (fig 4).
Load product and press control button (4) under the start icon



Fig 4

9. If a turn pan time has been programmed, a buzzer will sound when the timer reaches 0.
Open the door, remove tray and turn around then replace it back in the oven.
Close the door to silence the buzzer and continue the bake cycle.
10. **At the end of bake time**, buzzer will sound, and (fig 5) will be displayed.
Open door and check product.
If done remove product, close door and press the stop button.

OR

If more time is needed, press key 4 under +1 min icon to increase bake by 1 minute increments
(-1 min button allows a decrease in time setting if too much is entered)

(press stop at any time to stop bake)



Fig 5

11. This will now take you back to program list screen (Fig 2, Page 15).

12. To bake in pre-heated oven, repeat from step 5.

NOTE: During heating (1) can be pressed at any time to check settings. (Press (1) or wait 10 seconds to return to previous screen).



Until oven is up to temperature the display will show “ HEATING”.

When correct temperature is reached display will show “READY”.

The oven will keep to set temperature until bake is started.

Oven will keep up to temperature of last product baked or new item on program list if chosen.

10.0 SMARTBAKE PROGRAMMING INSTRUCTIONS



BUTTONS USED TO PROGRAM OVEN WITHOUT USING A COMPUTER CONNECTION

1. Press stop to get to first screen Fig 6



Fig 6

2. Press and hold button 2 for 5 seconds for pass code screen Fig 7.

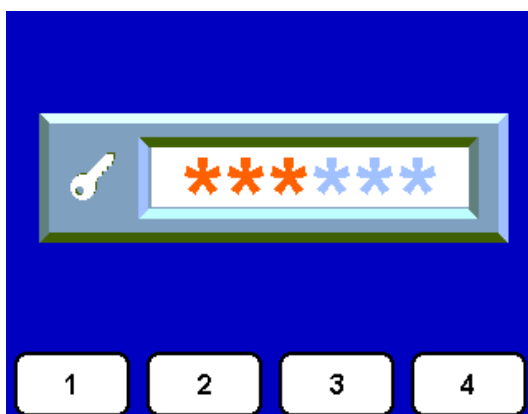


Fig 7

3. Enter pass code (default 111111). Fig 8 will appear.



Fig 8

4. Use scroll buttons to highlight the required product. Press enter. All parameters can now be set.

The oven is capable of six different phases per bake and if a lower number is required, bake time can be left at “0” to leave that phase inoperative.

To move **across** the screen press (4)

To move **back** press (1)

To **increase** value of parameter press (3)

To **decrease** value of parameter press (2)

POWER FAN LEVELS

TEMPERATURE

BAKE DURATION

(minutes)

TURN TIME

(minutes)

STEAM DURATION

(seconds)

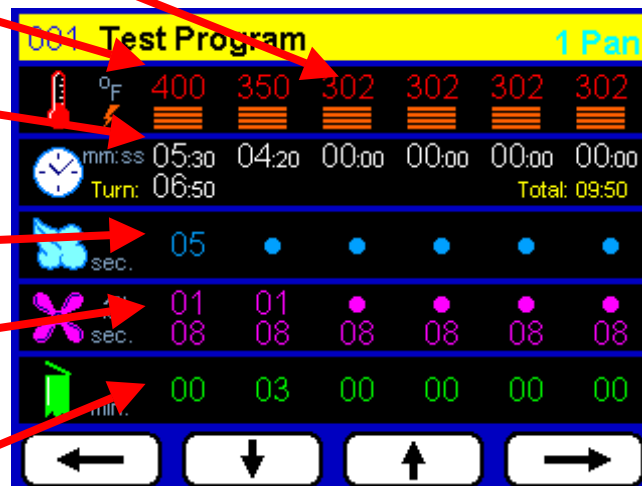
FAN CYCLES

FAN DWELL

(seconds)

DAMPER DELAY

(from start of bake phase)



PROGRAM TITLE

Press (6) to go up alphabet, press (5) to go down alphabet. After each letter has been chosen press (4) to go to next position. If a mistake is made, pressing (1) will go back to previous position.

WHEN ALL PARAMETERS ARE COMPLETE PRESS STOP BUTTON THREE TIMES TO SAVE THE SETTINGS. REPEAT FOR EACH PROGRAM REQUIRED.

11.0

PROGRAMMING INSTRUCTIONS (UPLOAD/DOWNLOAD) USING “MONOLINK 6” SOFTWARE

SETTING UP THE CONNECTION

1. Ensure that “MONOLINK 6” is installed on your computer and the oven is showing the start screen (Dunkin Donut logo)
2. Connect oven to the computer using a null modem cable **A** as shown below.
(2 X 9 WAY D-TYPE CONNECTOR – BOTH FEMALE)

A



NULL MODEM CABLE
(2 X 9 WAY D-TYPE CONNECTOR – BOTH FEMALE)

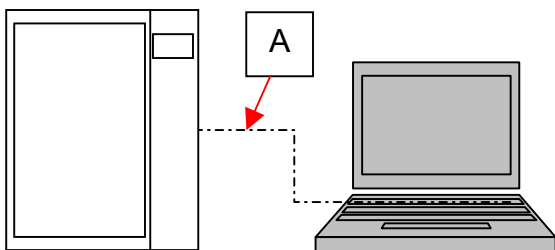
B



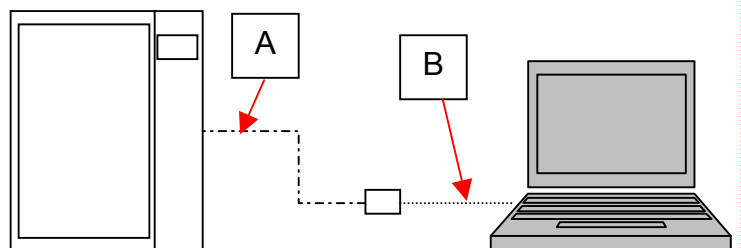
USB – SERIAL ADAPTOR WILL BE NEEDED IF A SERIAL PORT IS NOT AVAILABLE ON THE COMPUTER BEING USED.



LOOK FOR SOCKET ON THE SIDE OF THE OVEN CONTROL PANEL. REMOVE PLASTIC COVER TO EXPOSE THE CONNECTIONS.



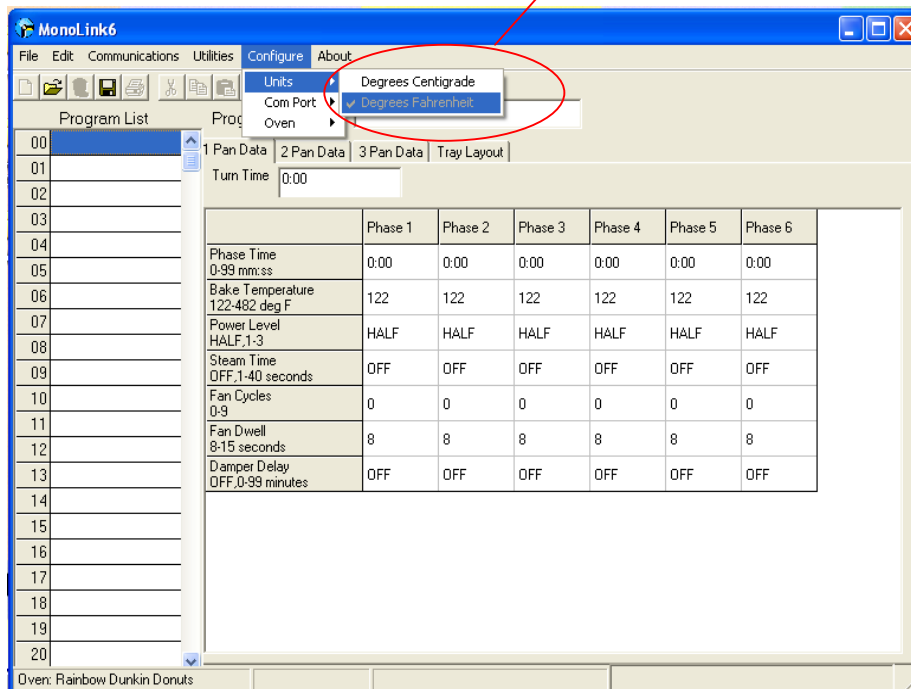
SERIAL TO SERIAL CONNECTION



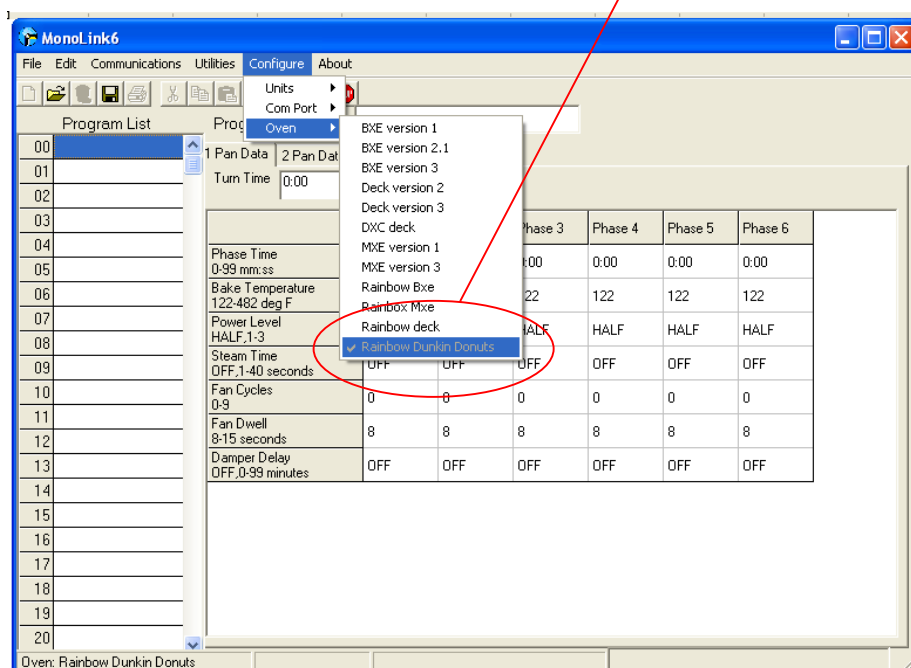
SERIAL TO USB CONNECTION

SETTING UP THE PROGRAM

1. Start "MONOLINK 6" on the computer.
2. Go to "configure / units" and ensure that "Degrees Fahrenheit" is ticked.

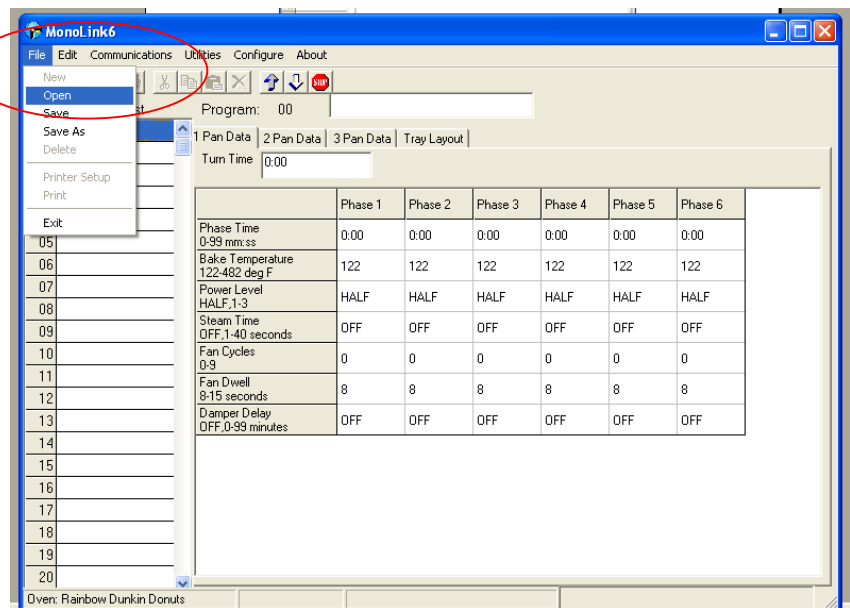


3. Go to "configure / oven" and ensure that "Rainbow Dunkin Donuts" is ticked.

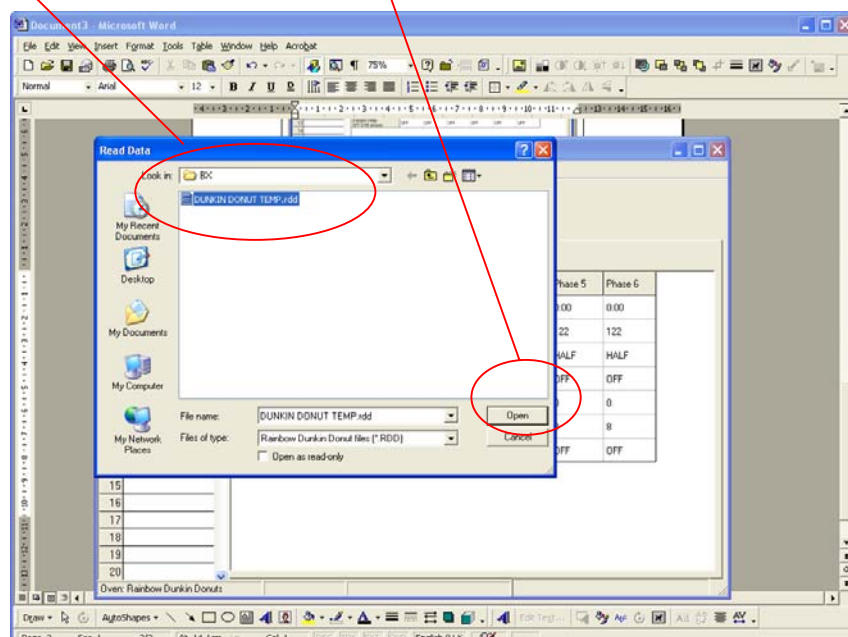


TO CHANGE A PROGRAM

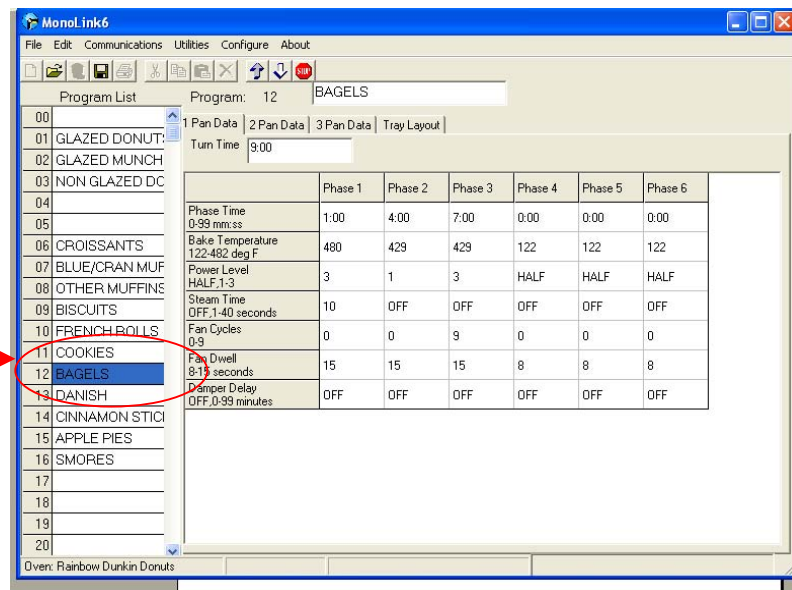
1. Go to “file / open”



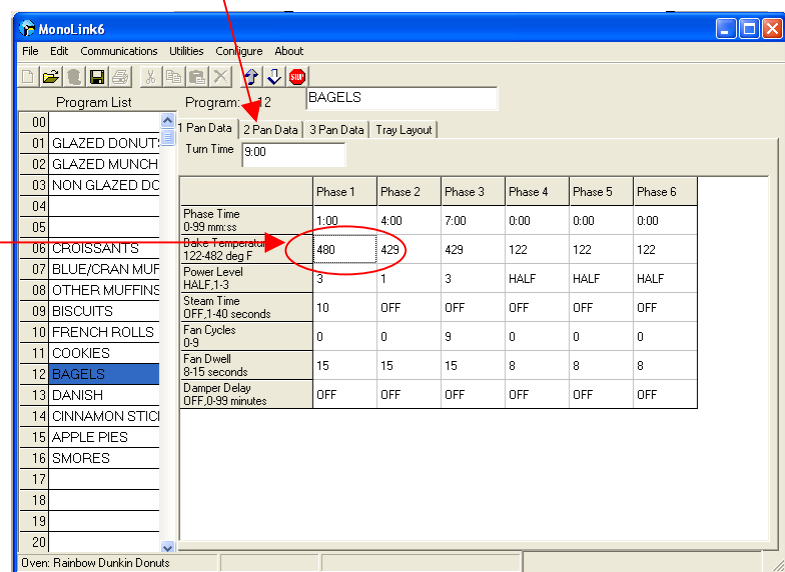
2. Find the file required, highlight it and click on “open”



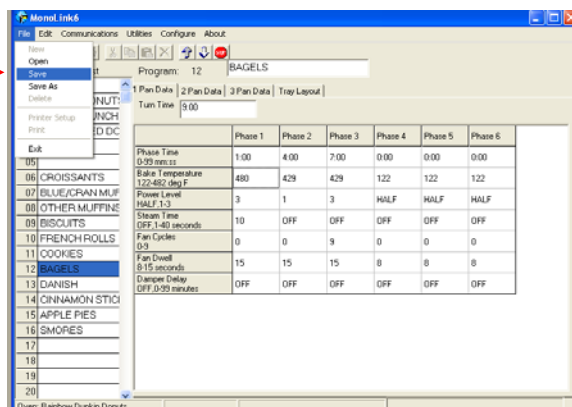
3. Highlight the product to change



4. Remember to choose 1 pan, 2 pan, or 3 pan, then click on the information to be changed. Enter the new number and press return.



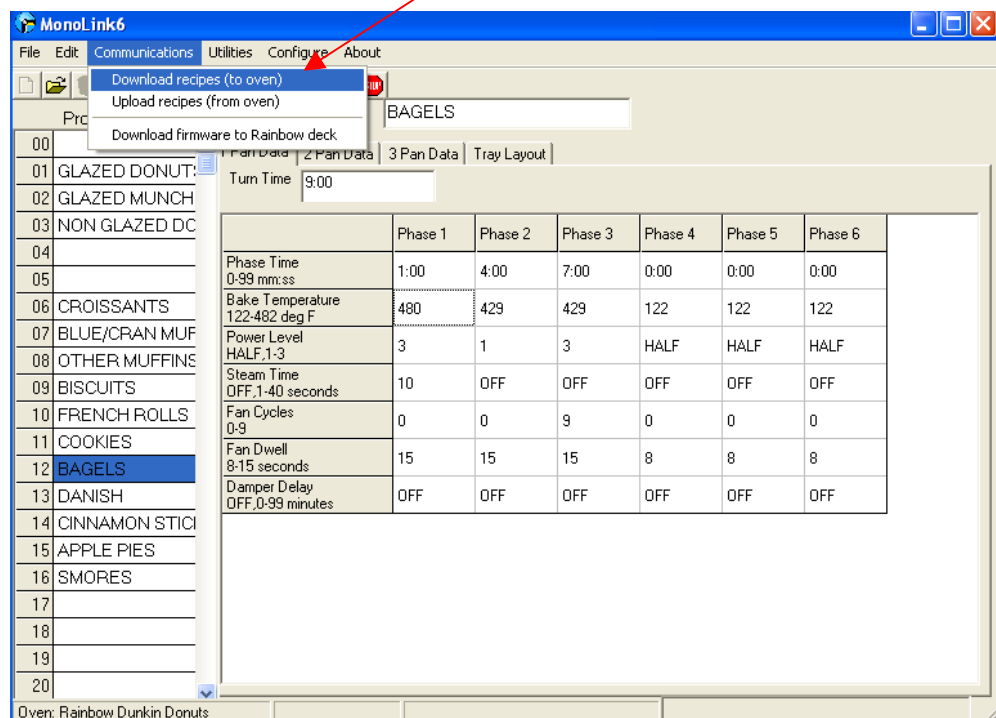
5. Go to "file/save" to save the changes or "file /save as" to save as a different file.



TO DOWNLOAD PROGRAM TO OVEN

1. Ensure the computer is connected to the oven and the correct program is loaded on the screen, then go to **“Communications/Download recipes (to oven)”**

The oven will show a counter (up to 99) in the corner of the screen which will disappear when the download is complete.



12.0 LIGHT BULB REPLACEMENT

Replacement bulb part number **B772-94-001**

In the event of a bulb failure, Instructions on how to change a bulb are as follows: -

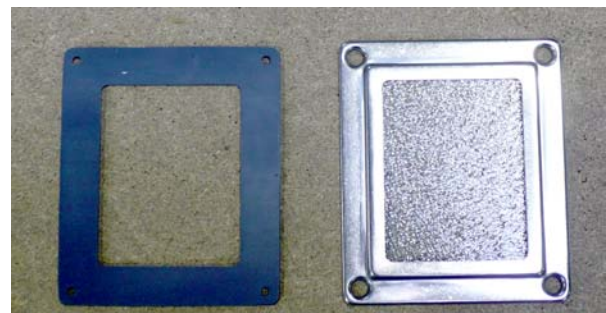
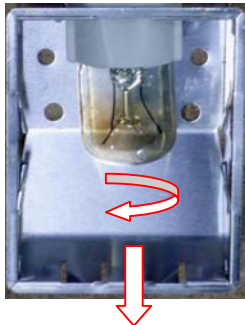
- Unplug oven from wall outlet and allow oven to cool completely.
- Remove screws (4 per light) and take glass, frame and gasket off lamp unit.



SCREWS



- Remove bulb by unscrewing in direction of arrow and replace with new bulb.



GASKET

Pt No.B721-67-008

GLASS AND FRAME

Pt No.B721-67-010

Pt No.B721-67-009

- Refit glass front taking care that gasket is in position around stainless steel frame.
- Re-connect oven and test.

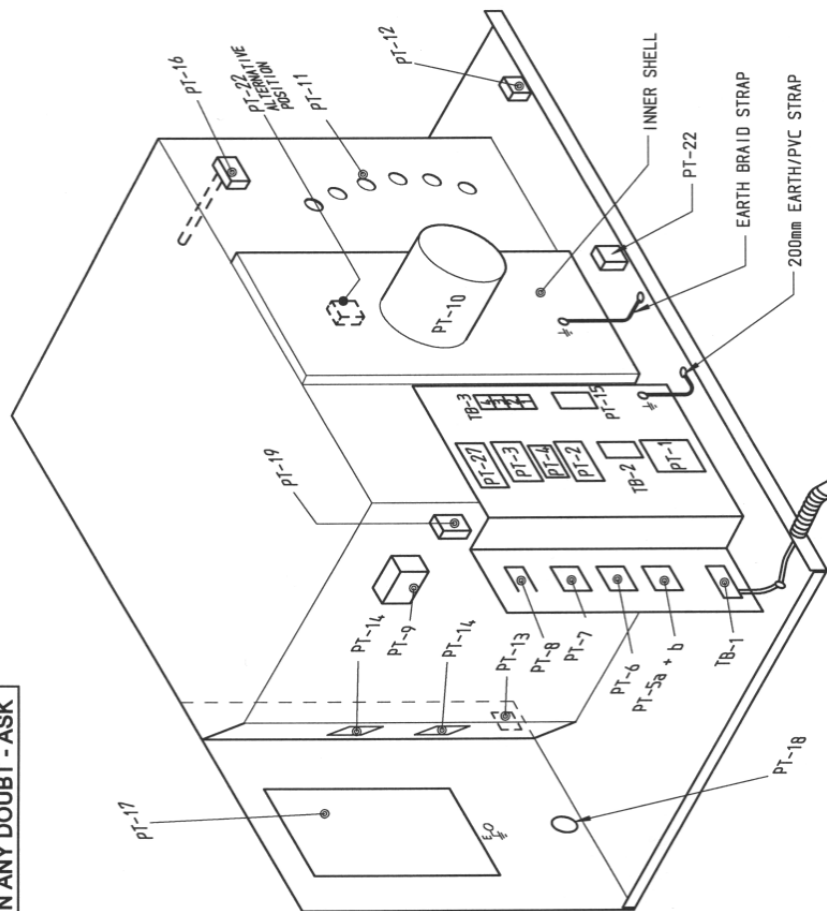
NOTE:

Bulbs can be ordered from Adamatic as part number **B772-94-001**
or
sourced locally as **125v 25w SES oven bulb (300deg C)**



13.0 REPLACEMENT PARTS

IF IN ANY DOUBT - ASK

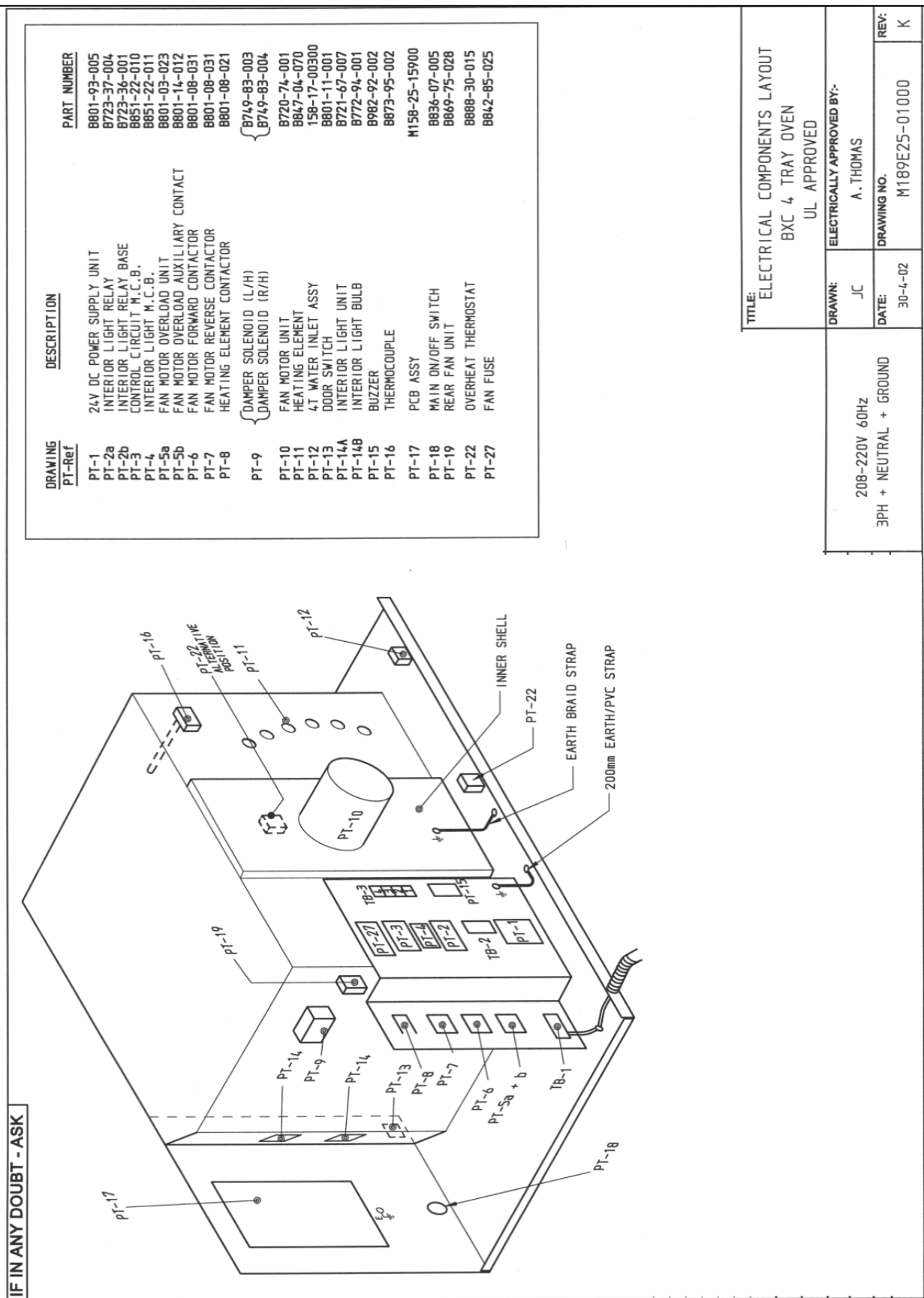


DRAWING PT-Ref	DESCRIPTION	PART NUMBER
PT-1	24V DC POWER SUPPLY UNIT	B801-93-005
PT-2a	INTERIOR LIGHT RELAY	B723-37-004
PT-2b	INTERIOR LIGHT RELAY BASE	B723-36-001
PT-3	CONTROL CIRCUIT M.C.B.	B851-22-010
PT-4	INTERIOR LIGHT M.C.B.	B851-22-011
PT-5a	FAN MOTOR OVERLOAD UNIT	B801-03-023
PT-5b	FAN MOTOR OVERLOAD AUXILIARY CONTACT	B801-14-012
PT-6	FAN MOTOR FORWARD CONTACTOR	B801-08-031
PT-7	FAN MOTOR REVERSE CONTACTOR	B801-08-031
PT-8	HEATING ELEMENT CONTACTOR	B801-08-021
PT-9	DAMPER SOLENOID (L/H)	B749-83-003
PT-10	DAMPER SOLENOID (R/H)	B749-83-004
PT-11	FAN MOTOR UNIT	B720-74-001
PT-12	HEATING ELEMENT	B847-04-070
PT-13	4T WATER INLET ASSY	158-17-00300
PT-14	DOOR SWITCH	B801-11-001
PT-14A	INTERIOR LIGHT UNIT	B721-67-007
PT-14B	INTERIOR LIGHT BULB	B772-94-001
PT-15	BUZZER	B982-92-002
PT-16	THERMOCOUPLE	B873-95-002
PT-17	PCB ASSY	M158-25-15900
PT-18	MAIN ON/OFF SWITCH	B836-07-005
PT-19	REAR FAN UNIT	B869-75-028
PT-22	OVERHEAT THERMOSTAT	B888-30-015
PT-27	FAN FUSE	B842-85-025

MECHANICAL PARTS

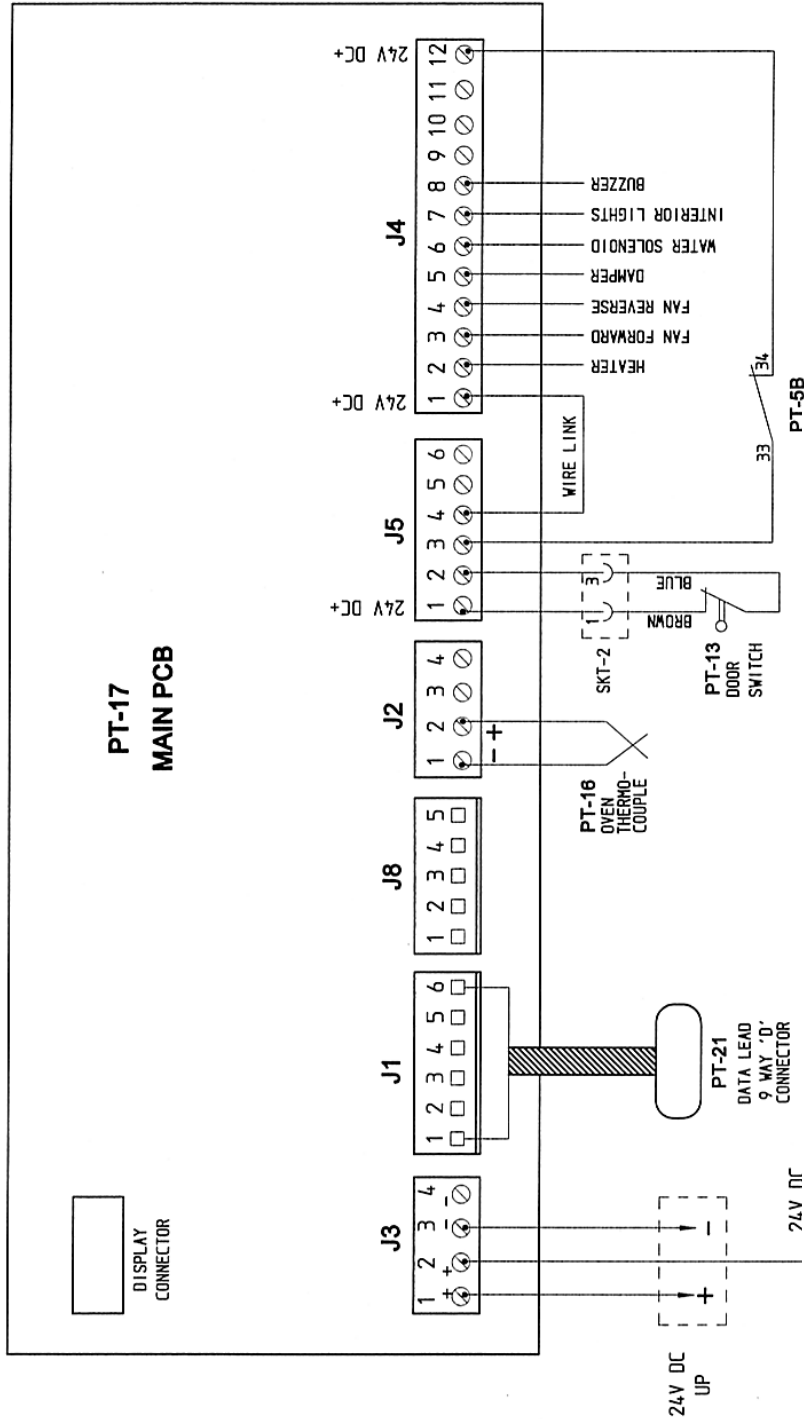
DOOR SEAL	M159-03-01500
OUTER DOOR GLASS	M159-03-11000
INNER DOOR GLASS	M159-03-20800
HANDEL	A900-27-118
BLUE WATER HOSE	A900-34-087
WATER INLET ASSY	M158-17-00300
DRIP TRAY	M205-12-00500
TRAY RUNNER RH	M189-01-01400
TRAY RUNNER LH	M189-01-01401

14.0 ELECTRICAL INFORMATION



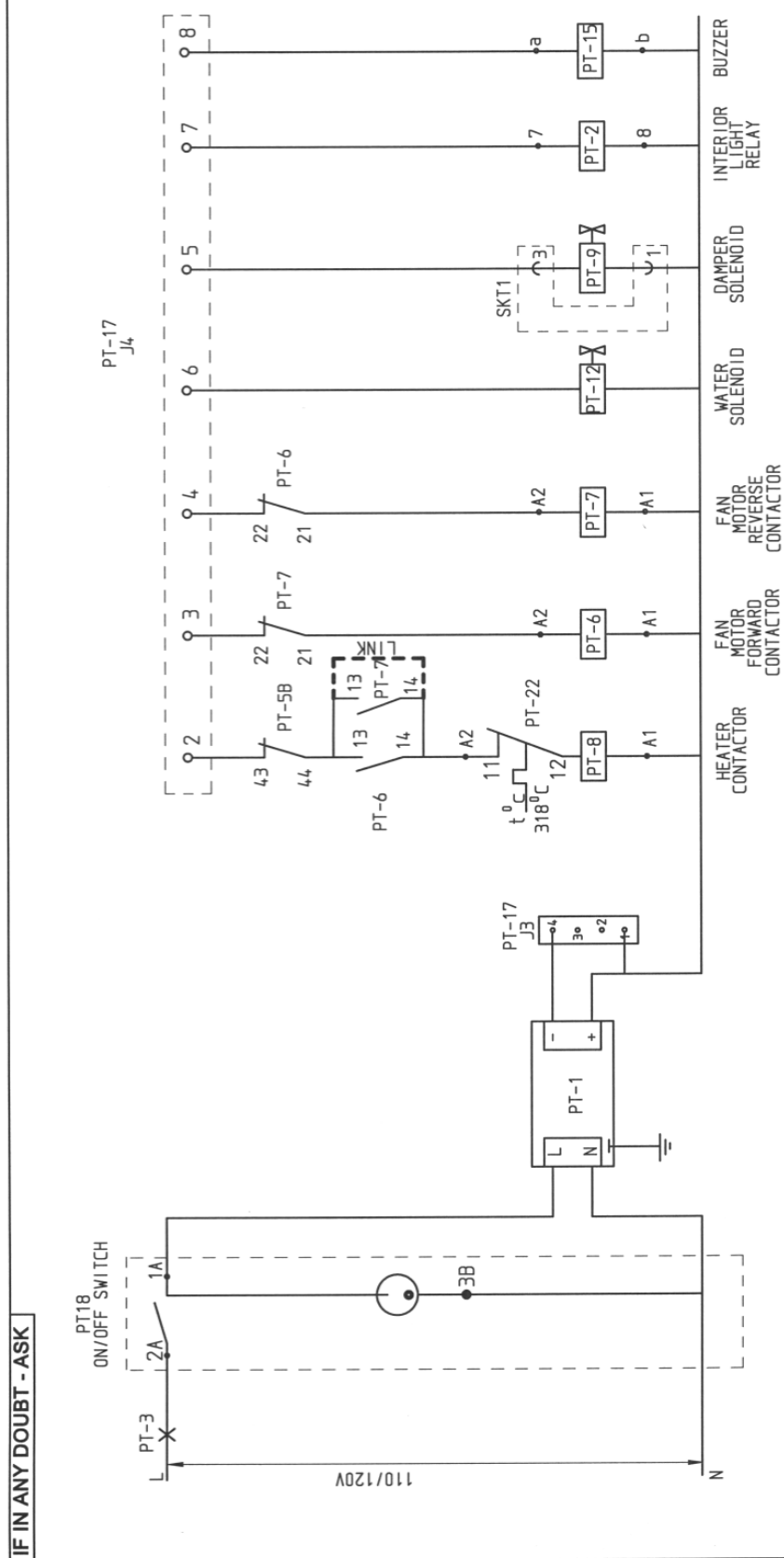
CONTROL PANEL WIRING DIAGRAM

IF IN ANY DOUBT - ASK



REVISION	ECN NO.
TITLE:	BXC 4 TRAY OVEN PCB CONNECTIONS
DRAWN:	ELECTRICALLY APPROVED BY:- JC P. BOYLES
DATE:	DRAWING NO. 15-3-2
REV:	REV: M158E25-21000 —

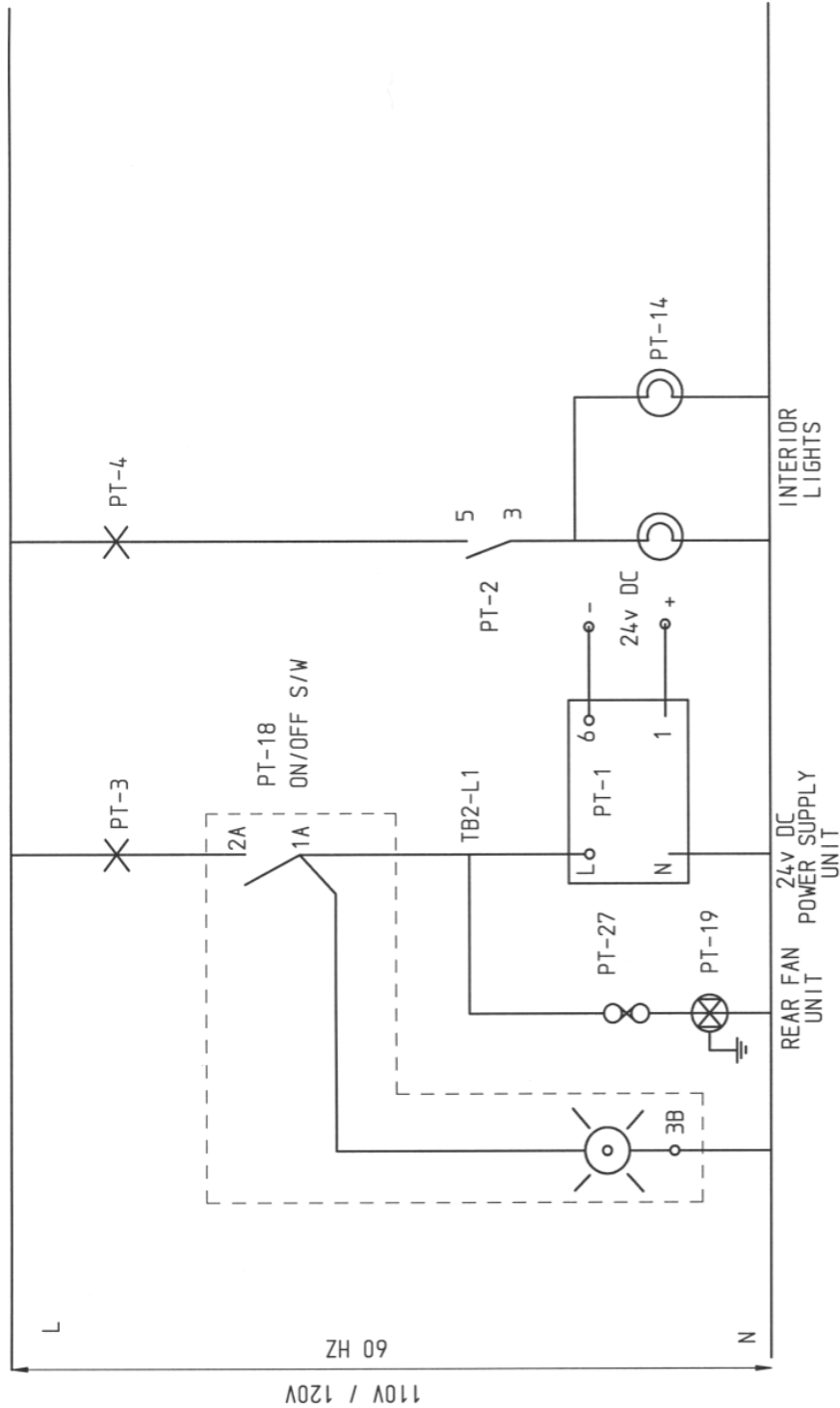
CONTROL PANEL OUTPUT SCHEMATIC



REVISION		ECN NO.
TITLE:		
<p>P.C.B. OUTPUTS 4 TRAY BXC OVEN</p>		
MULTI CABLE		UL APPROVED
		DUNKIN DONUTS
ELECTRICAL SPECIFICATIONS:- 1208/220 3PH.GROUND 60Hz and 120V 1P,NEUTRAL,GROUND 60Hz	DRAWN:	ELECTRICALLY APPROVED BY:-
	JC/RAC	P.BOYLES
	DATE: 14-2-08	DRAWING NO. M189E25-03200
		REV: --

110V WIRING SCHEMATIC

IF IN ANY DOUBT - ASK



TITLE: CONTROL CIRCUIT BXC OVEN

UL APPROVED

DRAWN: JC
ELECTRICALLY APPROVED BY: P. BOYLES

DATE: 2-5-02
DRAWING NO. M189E25-00400
REV: B

ELECTRICAL SPECIFICATIONS:-
208v/220v 3Ph+N+E 60Hz

208V WIRING SCHEMATIC

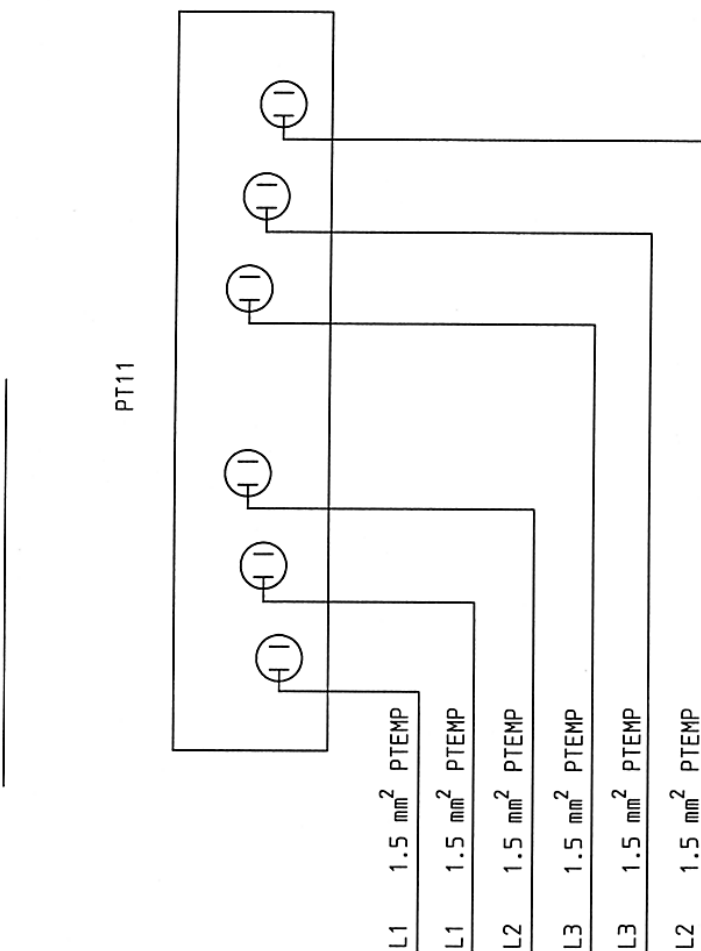


REVISION		ECN NO.
TITLE: POWER CIRCUIT DIAGRAM 4 TRAY OVEN UL APPROVED		
DRAWN: JC	ELECTRICALLY APPROVED BY:- P. BOYLES	
DATE: 30-4-02	DRAWING NO. M189E25-00100	REV: -

BLOWER MOTOR: HEATING ELEMENT WIRING DIAGRAM

IF IN ANY DOUBT - ASK

HEATING ELEMENT WIRING



FAN MOTOR CONNECTIONS

TITLE: FAN MOTOR CONNECTIONS & HEATING ELEMENT WIRING			
DRAWN: JC		UL APPROVED	
ELECTRICALLY APPROVED BY:-		P. BOYLES	
DATE: 2-5-02	DRAWING NO. M189E25-00500	REV: -	

ADAMATIC

814 44th Street NW
Suite 103
Auburn, WA 98001

U.S.A.

Tel. 800.526.2807

Fax: 732-544-0735

Web: www.adamatic.com
Email: info@adamatic.com